

The Peripheral ossifying Fibroma of Gingiva: A Case Report

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ABSTRACT

Localized gingival growths are most commonly encountered in the oral cavity. These are usually considered as reactive growths. The Peripheral ossifying Fibroma (POF) is one of reactive gingival overgrowth most commonly found in females; usually arise in the interdental papilla. POF is difficult to diagnose due to lesions with similar clinical presentation like pyogenic granuloma, irritational fibroma, and peripheral giant cell granuloma. So, careful diagnosis of POF is important to avoid unnecessary aggressive treatment. The definitive diagnosis is usually established by using histopathological examination. Usually complete surgical excision provides an excellent prognosis, though the recurrence rate can be 20-22%.

Key Words: Gingiva, Fibroma, Peripheral ossifying fibroma, pyogenic granuloma.

INTRODUCTION

Localized gingival growths are most frequently encountered lesions in the oral cavity and peripheral ossifying fibroma is one of them. It accounts for 3.1% of all oral tumours and for 9.6% of gingival lesions (1, 2). Though etiopathogenesis is uncertain, an origin from cells of the periodontal ligament has been suggested due to irritants such as trauma, plaque, calculus, faulty restorations and dental appliances (3, 4, and 5). It is typically seen as a gingival swelling of interdental papilla commonly affecting female of 2nd and 3rd decades of life (6). POFs are usually less than 1.5 cm in diameter, slow growing in nature, spherical in shape, pink in colour, surface may be ulcerated and base may be sessile or pedunculated (7,8). Diagnosis can be made by clinical inspection and histopathological examination.

CASE REPORT

A 25 year old male patient reported to the Shri Ganesh Dental clinic with a complaint of slowly growing, painless gingival growth in mandibular posterior region over the lingual surface of right first molar (Figure 1). The medical and dental history was not relevant except that the tooth involved was root canal treated.

On clinical examination, a solitary sessile reddish pink exophytic growth of 1.5cm diameter was seen the lingual surface of right first molar. The associated tooth was firm but root canal treated (Figure 1). On palpation growth was firm and non tender. Radiographic examination reveals no abnormality (Figure 2). After complete blood examination, the lesion was surgically excised (Figure 3) and specimen (Figure 4) sent for histopathological examination. Biopsy reveals growth is of peripheral ossifying Fibroma (Figure 5).



Figure 1: Intraoral photograph of soft lesion over the lingual side in relation to the first molar.



Figure 2: OPG showing Root canal treated first Molar.

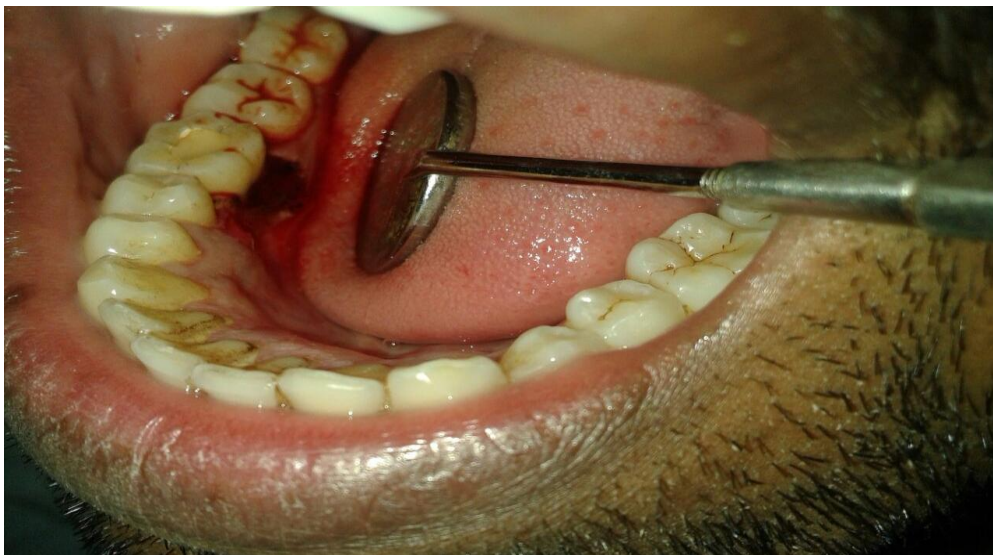


Figure 3: Wound after complete Excision of the Fibrous lesion.

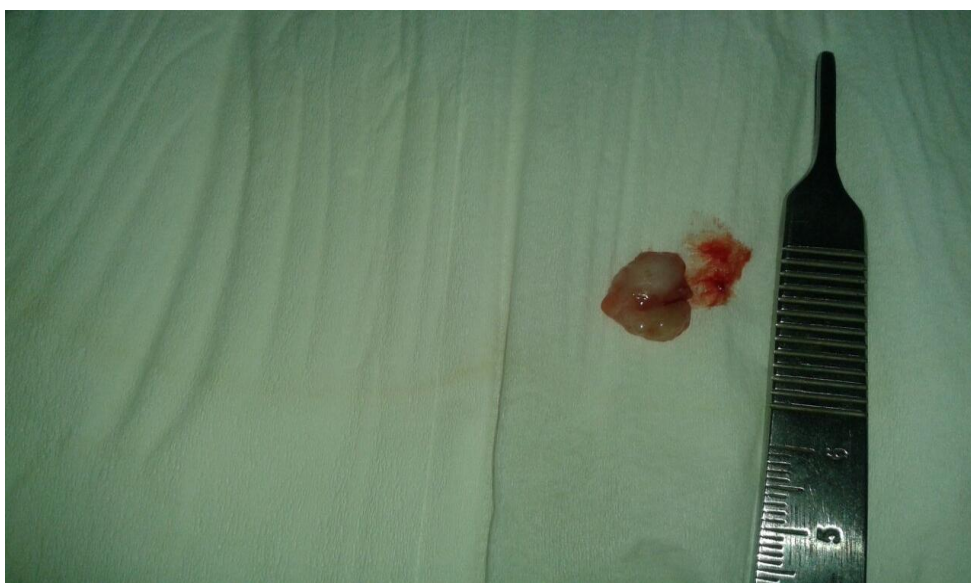


Figure 4 Biopsy Specimen.

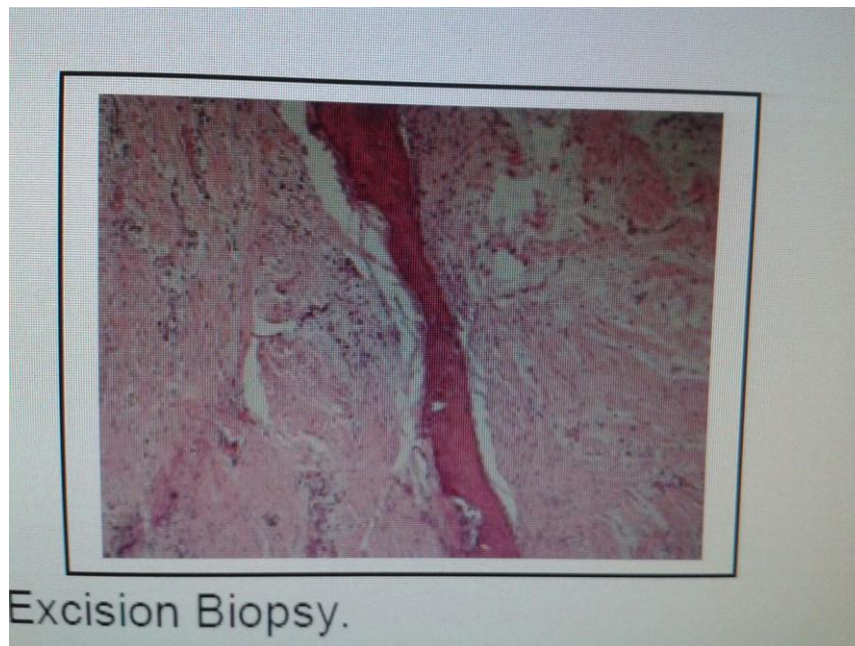


Figure 5: Histopathological view showing ulcerated polypoid subepithelial lesion composed of cellular stroma.

DISCUSSION

Peripheral ossifying Fibroma is a reactive, non-neoplastic lesion of gingiva, usually results due to local irritation caused by subgingival calculus, dental appliances, poor quality restorations or trauma. POF usually occurs at the region of interdental papilla and accounts for 9.6% of all biopsy reports of the gingival lesion (9). Most of the cases found in second decade of the life. Almost two-third of all cases occurs in females (1), with a predilection for anterior maxilla (1, 10). POF does not require imaging beyond radiograph (11).

Histologically, fibrous proliferation with large number of fibroblasts is seen associated with the formation of mineralized product. So, the characteristic feature of the peripheral ossifying fibroma is highly cellular connective tissue containing foci of calcified material.

We present a rare case of POF seen in mandibular gingiva over lingual side in a male patient. The etiopathogenesis of the lesion is not known, trauma or local irritation, subgingival tartar may influence the development of the lesion. Differential diagnosis of this condition includes pyogenic granuloma, traumatic fibroma and peripheral giant cell granuloma (12).

Treatment of choice is local excision with periodontal and periosteal component to prevent reoccurrence. Recurrence rate is high 8-20% (13, 14), so close post operative follow-up is required.

CONCLUSION

Peripheral ossifying Fibroma is a common slow growing reactive lesion of gingiva which goes unnoticed for long periods because of lack of symptoms and many times clinically diagnosed as pyogenic granuloma. Radiological and histological examination is required for confirmation of diagnosis.

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